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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Rebecca J. Jackman et al.
Serial No.: 09/694,074
Confirmation No.: 2002
Filed: October 20, 2000
For: ELASTOMERIC MASK AND USE IN FABRICATION OF DEVICES
Examiner: Frederick John Parker
Art Unit: 1762

DECLARATION UNDER 37 C.F.R. §1.132

I, Professor Klavs F. Jensen, declare that:

1. I am the Lammot du Pont Professor of Chemical Engineering and a Professor of Materials Science and Engineering at the Massachusetts Institute of Technology. I have a Ph.D. from the University of Wisconsin and an M.Sc. and Dr. Tech. (hon) from the Technical University of Denmark.
2. I have authored or co-authored over 240 publications in academic peer-reviewed journals and over 160 in conference proceedings, and am named as a co-inventor on 16 patents. I have also served on several editorial boards of professional journals, the Royal Society of Chemistry Journal Lab-on-a-Chip, ACS Chemistry of Materials and ACS Industrial, Engineering Chemistry Research, and Oxford University Press - Topics in Chemical Engineering.
3. I have read and understood the specification of U.S. Pat. Appl. 09/694,074 and the Office Action issued on November 7, 2005. I am a co-inventor of this application.
4. I have an interest in the issuance of this application as a patent. I am employed by the Massachusetts Institute of Technology, an owner of the application. As an inventor on the application, a portion of royalties derived from this application and/or any patent issuing from this application will flow to me.
5. The Office Action states on p. 3, ¶6 that "it is the Examiner's position that any element is a biological agent since it may interact with biological species, either as an irritant, allergen, or in the case of gold materials as a medicament for at least arthritis." The Office Action also states on p. 6 that "The Examiner takes Official Notice that at least cadmium oxide is a biological agent as broadly used by Applicants because cadmium oxide is inherently a poison, carcinogen, and causes lung and kidney damage, hence its deleterious effects make it a 'biological agent'."
6. In my opinion, the Patent Office has unreasonably interpreted "biological agent" too broadly. Based on the Patent Office's interpretation, since nearly every substance ever identified by humans can interact with a biological species in some fashion, nearly every substance ever identified by humans would be a biological agent. Thus, this interpretation is so excessively broad as to be rendered meaningless.

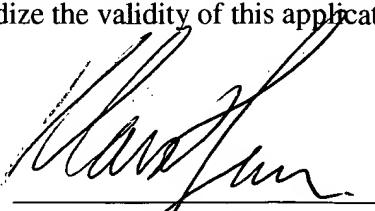
7. Additionally, the Patent Office's interpretation of "biological agent" is inconsistent with the use of the phrase "biological agent" as used in the specification. The specification provides a protein as an example of a biological agent on p. 20, line 5, and notes that "biological agents" may have a "native form" on p. 20, lines 19-21. In addition, "biological agents" may have "biological binding partners," as described on p. 20, lines 27-29, and the specification gives examples of biological binding partners such as "antibody/antigen, antibody/hapten, enzyme/substrate, enzyme/inhibitor, enzyme/cofactor, biotin/avidin, binding protein/substrate, carrier protein/substrate, lectin/carbohydrate, receptor/hormone, receptor/effectector, complementary strands of nucleic acid, repressor/inducer, and the like."

8. Thus, one of ordinary skill in the art, in giving "biological agent" the broadest reasonable interpretation in the context of the specification, would not interpret "biological agent" to be any agent able to interact with a biological species in some fashion. Such a definition is unreasonably broad and encompasses practically all substances ever identified.

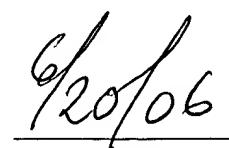
9. In my opinion, the plain meaning of the phrase "biological agent," as read by one of ordinary skill in the art in the context of the specification, is an agent that is biological in nature, not one that is not biological in nature but has the ability to interact with a biological species in some fashion. More specifically, the phrase "biological agent" consists of an "agent," modified by the word "biological." Thus, the agent cannot be just any agent, but must be an agent that is "biological" in nature.

10. This meaning (paragraph 9) is consistent with the way "biological agent" is used in the specification; and the specification itself serves to point to this meaning, not the meaning stated by the Patent Office. For example, as noted above, the specification illustrates a protein as an example of a biological agent, and notes that "biological agents" may have a "native form," or biological binding partners. Thus, one of ordinary skill in the art, in reading "biological agent" in the context of the specification, would understand that the ordinary and customary meaning of "biological agent" is an agent that is biological in nature.

11. All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further, these statements were made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that any such willful false statements may jeopardize the validity of this application or any patent issued thereon.



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Date